WHAT IS CLAIMED IS:

1. An information processing system comprising:

a first information processor; and

a second information processor,

wherein the first information processor measures a spatial position of an object so as to output a measured value, and

wherein the second information processor,

processes the measured value, which has been output from the first information processor and indicates the position of the object in a measurement space, and further processes a real-space value, which corresponds to the measured value and indicates the position of the object in a real space,

computes correspondence between the measurement space and the real space based on the measured value and the real-space value, and

corrects an error of the measured value based on the computed correspondence between the measurement space and the real space, the error resulting from the ambient environment of the first information processor.

2. An information processing method performed by an information processing system comprising a first information processor and a second information processor,

wherein the first information processor measures a spatial position of an object so as to output a measured value, and

wherein the second information processor,

processes the measured value, which has been output from the first information processor and indicates the position of the object in a measurement space, and processes a real-space value, which corresponds to the measured value and indicates the position of the object in a real space,

computes correspondence between the measurement space and the real space based on the measured value and the real-space value, and

corrects an error of the measured value based on the computed correspondence between the measurement space and the real space, the error resulting from the ambient environment of the first information processor.

3. An information processor comprising:

measured-value input means for inputting a measured value indicating a spatial position of an object, the measured value being measured by and output from a first 3D-position measuring device;

real-space-value input means for inputting a real-space value which corresponds to the measured value input by the measured-value input means and which indicates the position of the object in a real space;

correspondence computing means for computing correspondence between the measurement space and the real space based on the measured value input by the measured-value input means and the real-space value input by the real-space-value input means; and

correcting means for correcting an error of the measured value input by the measured-value input means based on the correspondence between the measurement space and the real space computed by the correspondence computing means, the error resulting from the ambient environment of the first 3D-position measuring device.

4. The information processor according to Claim 3, wherein the first 3D-position measuring device includes a magnetic 3D-position measuring device.

5. The information processor according to Claim 3, wherein, when a second 3D-position measuring device, which can measure the position of the object without being affected by the ambient environment, measures the position of the object existing at the same position as that measured by the first 3D-position measuring device so as to output the measured value, the real-space-value input means inputs the measured value output from the second 3D-position measuring device as the real-space value.

6. The information processor according to Claim 5, wherein the second 3D-position measuring device includes an optical 3D-position measuring device.

7. The information processor according to Claim 5, wherein the second 3D-position measuring device includes an ultrasonic 3D-position measuring device.

8. The information processor according to Claim 5, wherein the second 3D-position measuring device includes a mechanical 3D-position measuring device.

9. The information processor according to Claim 3, wherein the correspondence computing means estimates a measured value which has not been input by the measured-value input means and a real-space value which has not been input by the real-space-value input means based on at least one measured value input by the measured-value input means and at least one real-space value input by the real-space-value input means, and computes the correspondence between the measurement space including the input measured value and the estimated measured value and the real space including the input real-space value and the estimated real-space value.

10. The information processor according to Claim 3, wherein the correspondence computing means selects part of a plurality of measured values input by the measured-value input means and part of a plurality of real-space values input by the real-space-value input means in accordance with a predetermined selecting method, and computes the correspondence between the measurement space and the real space based on the selected measured value and real-space value.

11. The information processor according to Claim 10, wherein, in the selecting method, part of the plurality of measured values input by the measured-value input means and part of the plurality of real-space values input by the real-space-value input means are selected based on spatial-position relationship between each of the plurality of real-space values and another real-space value.

12. The information processor according to Claim 10, wherein, in the selecting method, part of the plurality of measured values input by the measured-value input means and part of the plurality of real-space values input by the real-space-value input means are selected based on the input time of each of the measured values to the measured-value input means and on the input time of each of the real-space values to the real-space-value input means.

13. The information processor according to Claim 3, wherein the correspondence computing means sequentially updates the correspondence between the measurement space and the real space every time a predetermined condition is satisfied, and the correcting means corrects the measured value input by the measured-value input means based on the latest correspondence between the measurement space and the real space.

14. The information processor according to Claim 13, wherein the condition for updating the correspondence between the measurement space and the real space is a lapse of predetermined time from the time when the correspondence between the measurement space and the real space was last updated.

15. The information processor according to Claim 13, wherein the condition for updating the correspondence between the measurement space and the real space is set based on spatial-position relationship between the real-space value input by the real-space-value input means and each of the plurality of real-space values which have already been input.

16. The information processor according to Claim 3, further comprising output control means for performing control so as to output information for notifying the user whether or not the measured value and the real-space value, which are required for computing the correspondence between the measurement space and the real space by the correspondence computing means, have been input by the measured-value input means and the real-space-value input means.

17. An information processing method performed by an information processor, which corrects a measured value indicating a spatial position of an object, the measured value being measured by and output from a 3D-position measuring device, the method comprising:

a measured-value input step of inputting the measured value which has been output from the 3D-position measuring device and which indicates the position of the object in a measurement space;

a real-space-value input step of inputting a real-space value which corresponds to the measured value input in the measured-value input step and which indicates the position of the object in a real space;

a correspondence computing step of computing correspondence between the measurement space and the real space based on the measured value input in the measured-value input step and the real-space value input in the real-space-value input step; and

a correcting step of correcting an error of the measured value input in the measured-value input step based on the correspondence between the measurement space and the real space computed in the correspondence computing step, the error resulting from the ambient environment of the 3D-position measuring device.

18. A program which allows a computer to execute correction of a measured value which has been measured by a 3D-position measuring device and which indicates a spatial position of an object, the program comprising:

a correspondence computing step of computing correspondence between a measurement space and a real space based on the measured value which has been measured by the 3D-position measuring device and which indicates the position of the object in the measurement space and on a real-space value which corresponds to the measured value and which indicates the position of the object in the real space; and

a correcting step of correcting an error of the measured value measured by the 3D-position measuring device based on the correspondence between the measurement space and the real space computed in the correspondence computing step, the error resulting from the ambient environment of the 3D-position measuring device.